c) nucleotide sequences that are completely complementary to the nucleotide sequences of a) or b).

4. An isolated RNAi or antisense nucleic acid molecule that selectively binds to the nucleic acid molecule of claim **3**.

5. An isolated antibody that selectively binds to the protein of claim **1**.

6. The antibody of claim **5**, wherein the antibody is at least one of a monoclonal, polyclonal, fully human, humanized, chimeric, single-chain, or anti-idiotypic antibody.

7. A cell line, hybridoma, phage, or transgenic organism that produces the antibody of claim **5**.

8. The antibody of claim **5**, wherein the antibody is coupled to a composition selected from the group consisting of detectable substances and therapeutic agents.

9. A composition comprising the antibody of claim **5** and a pharmaceutically acceptable carrier.

10. An isolated antibody fragment of the antibody of claim **5**, wherein the antibody fragment comprises a fragment selected from the group consisting of:

a) an Fab fragment;

b) an F(ab')2 fragment; and

c) an Fv fragment.

11. A method of modulating cell proliferation or apoptosis, the method comprising contacting a cell with the antibody of claim **5**.

12. The method of claim **11**, wherein the method comprises either inhibiting proliferation of kidney cancer cells or stimulating apoptosis of kidney cancer cells.

13. A method of modulating cell proliferation or apoptosis, the method comprising contacting a cell with the RNAi or antisense nucleic acid molecule of claim **4**.

14. A method of detecting the protein of claim **1** in a sample, the method comprising contacting the sample with an isolated antibody that selectively binds to the protein and determining whether the antibody binds to the protein.

15. A method of detecting the nucleic acid molecule of claim **3** in a sample, the method comprising contacting the sample with an oligonucleotide that specifically hybridizes to the nucleic acid molecule and determining whether the oligonucleotide binds to the nucleic acid molecule.

16. A method of diagnosing, prognosing, or determining risk of kidney cancer in a subject, the method comprising detecting at least one molecule in a sample, wherein the presence or abundance of the molecule is indicative of kidney cancer, and wherein the molecule is selected from the group consisting of:

a) proteins comprising an amino acid sequence selected from the group consisting of SEQ ID NOS:1-2736 and 5165-6044;

b) antibodies that selectively bind to the protein of a);

c) nucleic acid molecules comprising a nucleotide sequence selected from the group consisting of SEQ ID NOS:2737-5164 and nucleotide sequences that encode the protein of a); and

d) nucleic acid molecules comprising a nucleotide sequence that is completely complementary to the nucleic acid molecule of c).

17. A method of treating kidney cancer, the method comprising administering a therapeutically effective amount of the antibody of claim **5** to a subject.

18. A method of screening agents, the method comprising contacting the protein of claim **1** or a cell that expresses the protein with an agent, and assaying for whether the agent binds to the protein or modulates the function, activity, or expression of the protein.

19. A composition comprising the agent identified by the method of claim **18** and a pharmaceutically acceptable carrier.

20. A method of determining or predicting the effectiveness of a treatment or selecting a treatment for administration to a subject having kidney cancer, the method comprising detecting the presence, abundance, or activity of the protein of claim **1** in a sample and determining or predicting the effectiveness of the treatment or selecting the treatment for administration based on the presence, abundance, or activity of the protein.

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